

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF OHIO
EASTERN DIVISION

UNITED STATES <i>ex rel.</i>	:	Case No. 1:00CV208
PRAM NGUYEN,	:	
	:	
Plaintiff - Relator	:	JUDGE O'MALLEY
	:	
v.	:	
	:	<u>MEMORANDUM & ORDER</u>
	:	
CITY OF CLEVELAND, OHIO and	:	
CUYAHOGA PORT AUTHORITY,	:	
	:	
Defendants.	:	

UNITED STATES <i>ex rel.</i>	:	Case No. 1:03CV1563
PRAM NGUYEN,	:	
	:	
Plaintiff - Relator	:	JUDGE O'MALLEY
	:	
v.	:	
	:	<u>MEMORANDUM & ORDER</u>
	:	
TOLEDO LUCAS COUNTY	:	
PORT AUTHORITY	:	
	:	
Defendant.	:	

This matter arises on Defendants City of Cleveland, Ohio / Cuyahoga Port Authority (the “Cleveland Airport” or “Hopkins Airport”) (Case No. 1:00cv208) and Toledo-Lucas County Port Authority’s (the “Toledo Airport”) (Case No. 1:03cv1563) (collectively, “the Airports”) *Motions for Summary Judgment* (Doc. 101 in Case No. 1:00cv208 and Doc. 90 in Case No. 1:03cv1563). For the reasons outlined more fully below, both motions are **GRANTED** and Relator Pram Nguyen’s (“Plaintiff” or “Nguyen”) claims against the Airports are **DISMISSED**.

I. BACKGROUND

On January 24, 2000, Plaintiff, a former employee of the City of Cleveland Air Pollution Control Board, filed this *qui tam* action under the *False Claims Act* (“FCA” or “the Act”), 31 U.S.C. § 3729 *et seq.*, against seventy (70) defendants, each of whom operate airports across the country. The case was assigned to the Honorable Lesley Wells of this Court. Pursuant to 31 U.S.C. § 3730(b)(2), the Court sealed Plaintiff’s *qui tam* Complaint until the United States of America (the “Government”) decided whether it would intervene and pursue the case on its own. The Government ultimately declined to intervene, and the case was thereafter unsealed on November 13, 2000. As permitted under the statute, Plaintiff is now pursuing the claims on his own.

On December 20, 2001, Plaintiff amended his Complaint reducing the total number of defendants to forty-eight (48). The substance of his claims against each defendant, however, remained the same. On March 15, 2002, all but a few of the forty-eight defendants filed Motions to Dismiss the actions against them, asserting that Plaintiff’s Complaint suffered from a number of deficiencies, primarily relating to rules regarding joinder, venue and personal jurisdiction. On April 18, 2003, this action was transferred to the undersigned.

Following a hearing on the still-pending Motions to Dismiss, by order dated July 24, 2003 (Doc. 79 in both cases), the Court dismissed, as being improperly joined, all of Plaintiff’s claims against all but two defendants – namely, the Cleveland Airport and the Toledo Airport. Finding that joinder was improper as to the Toledo Airport as well, the Court ordered that the Plaintiff pursue his claims against that airport under a separate case number. Accordingly, parallel cases resulted as between the Plaintiff and: 1) the Cleveland Airport (Case No. 1:00cv208); and 2) the Toledo Airport

(Case No. 1:03cv1563).¹

In sum, Plaintiff's allegations directly relate to the Airports' receipt of federal funds and the compliance certifications made in relation thereto. Indirectly, they relate to the Airports' deicing operations, which implicate various federal environmental laws. The allegations regarding the deicing operations differ as between the Airports only with regard to the *quantity* of deicing fluid each airport uses in its deicing operations. In all other respects, Plaintiff's claims and allegations against the Airports are identical. Consequently, the Airports' *Motions for Summary Judgment* are virtually identical and address the Plaintiff's claims and allegations in parallel form. The Court, therefore, addresses the motions jointly herein.

II. FACTUAL SUMMARY

Most of the relevant facts alleged in these cases are few, simple and undisputed. In fact, for purposes of the present motions, the Airports have stipulated in their briefs to all but one factual allegation set forth in the Second Amended Complaints.² The only allegation they challenge is Plaintiff's assertion that 20 to 35% of the ethylene and propylene glycol used in the Airports' deicing operations is "emitted" into the atmosphere – *i.e.*, the fact which is at the heart of the Plaintiff's allegation that various permit and reporting obligations arose under certain federal environmental laws. As to all of the other facts alleged, the Airports contend that, even if true, summary judgment

¹ While free to do so under the Court's ruling, Plaintiff apparently has not instituted any parallel actions against the many other airport defendants in the appropriate forums for doing so.

² Given these concessions, the Court need not make determinations relative to the federal environmental statutes indirectly at issue. For example, Plaintiff's Second Amended Complaints assert various characterizations with regard to defined terms under the statutes (*e.g.*, the Clean Air Act's terms: "major source," "stationary source," "hazardous air pollutant," or "volatile organic compound"). Accordingly, Plaintiff's characterizations, to the extent they do not themselves impose reporting and/or permit obligations, are taken as true.

in their favor is still required.³ The relevant undisputed facts are as follows.

During the winter months, snow and ice accumulate on airplanes and runways at the Airports. Because this snow and ice is a safety hazard, the Airports deice aircrafts by spraying them with hot water mixed with deicing fluid. Both the airlines and the Airports also use these mixtures on the runways to prevent the buildup of ice and snow. Deicing fluid includes propylene glycol and, before 2001, ethylene glycol.⁴

From 1992 through 2000, the Airports applied for, and received, federal funds from the Federal Aviation Administration (“FAA”) for airport improvements and expansion. In order to receive these funds, the Airports were required to make certain standard certifications to the Government, including assurances that they were in compliance with all applicable environmental laws. The Airports made the requisite certifications and, thereafter, received the federal funds. Based on these compliance certifications, and Plaintiff’s belief that the Airports’ deicing activities violate certain federal environmental laws, Plaintiff brought the instant False Claims Act claims against the Airports.

III. THE ARGUMENTS

³ As will be made clear *infra*, the Airports’ dispute with the Plaintiff’s proposed emission factor ultimately is immaterial to the Court’s ability to grant summary judgment. Though clearly a disputed fact, indeed the only disputed fact, summary judgment is appropriate in any event based on the nature of the Plaintiff’s claims.

⁴ In connection with arguments relating to aggregation, the briefs make the distinction between the Airports’ use of deicing fluids (*e.g.*, for the runways) and the airlines’ use of deicing fluids (*e.g.*, for the planes). For ease of reference herein, and because the distinction is immaterial to the Court’s decision, the Court refers to all deicing activities as being done by the Airports. The Court need not address, therefore, the “aggregation” arguments as they relate to a determination of whether the Airports are “major” or “stationary” sources for reporting purposes under the environmental statutes implicated in these cases.

Though the Plaintiff's claims indirectly implicate various federal environmental laws, specifically they are limited to direct and "reverse" False Claims Act violations only.⁵ In sum, the Plaintiff alleges that the Airports violated the FCA because they *knowingly* misrepresented to the Government that they were in compliance with all federal environmental laws, when, in actuality, their deicing operations violated the *Clean Air Act* ("CAA") (42 U.S.C. §§ 7401 *et seq.*), the *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* ("CERCLA") (42 U.S.C. §§ 9601 *et seq.*) and the *Emergency Planning and Community Right-to-Know Act of 1986* ("EPCRA") (42 U.S.C. §§ 11001 *et seq.*).

The Plaintiff argues that the Airports violated the Clean Air Act because they never obtained Title V permits for their emissions of ethylene and propylene glycol, which he maintains exceeded the acceptable levels defined in the statute. He alleges that they violated CERCLA and EPCRA by failing to notify certain local and federal government agencies about their discharge of these chemicals in quantities that he maintains exceeded acceptable levels. Though the Court's analysis must touch upon the aforementioned environmental statutes, for reasons made clear below, it does so only in the context of the underlying False Claims Act claims, which require "knowing" misrepresentations to the Government. Violations of federal environmental laws, alone, do not support False Claims Act claims; an entity that unwittingly violates an environmental law, and, thereafter, certifies compliance does not, therefore, necessarily violate the False Claims Act.

The parties agree that the Airports spray aircrafts and runways with deicing and anti-icing fluids during the winter months to remove ice from the aircrafts' surfaces and to prevent further accumulation of ice and snow on runway and taxi surfaces. Plaintiff contends, and the Airports

⁵ See this Court's July 24, 2003 *Memorandum and Order* at p. 3 (Doc. 79 in both cases).

concede, that the fluids used contain ethylene glycol. Ethylene glycol is defined as a “hazardous air pollutant” by the Clean Air Act,⁶ a “hazardous substance” by CERCLA⁷ and a “hazardous chemical,” for reporting purposes, by EPCRA.⁸ Plaintiff further contends that propylene glycol, given the quantities the parties agree were discharged, is a “volatile organic compound.” These characterizations, he maintains, give rise to certain federal environmental considerations that deal with the *emission* of these substances.

When these fluids are applied to an aircraft, only a portion of the sprayed fluids actually remains on the aircraft when it leaves the deicing pad. Most of the fluid sprayed either never reaches the aircraft or drips off after contact. Of the fluid that remains on the aircraft, some eventually emits to the atmosphere. Plaintiff contends that 20% to 35% of the total fluids sprayed runoff, mist or “sheer off” the aircraft during take-off and evaporate into the atmosphere, thereby contaminating the air, water, and soil near the Airports. He alleges that the amounts “emitted” into the atmosphere qualify as “reportable emissions” under the aforementioned environmental statutes and, as discussed below, give rise to certain obligations.

On their face, Plaintiff’s concerns focus on the environmental impact of these chemicals on the public. He avers that exposure to ethylene glycol can have a variety of adverse consequences in people – *e.g.*, including headaches; irritation of the eyes, nose, throat, and skin; nausea; vomiting; central nervous depression; convulsions; liver damage; kidney damage; respiratory distress; and, in

⁶ See 42 U.S.C. § 7412(b).

⁷ See 42 U.S.C. § 9601(14).

⁸ See 42 U.S.C. § 11004(a)(1) and 40 C.F.R. § 355.40(a). The EPCRA requires notification of certain agencies in the event of the release of “hazardous chemicals,” which include “hazardous substances,” as defined by CERCLA.

extreme circumstances, coma. In addition to ethylene glycol, Plaintiff alleges that deicing fluids contain a number of additives considered to be hazardous within the meaning of CERCLA and EPCRA. Given the Court's reasoning and conclusions below, further discussion regarding these other substances is unnecessary.

Due to the *amounts* of deicing fluid *emitted* to the atmosphere, Plaintiff asserts that the Airports were obligated to obtain Title V permits under the Clean Air Act.⁹ In addition, he contends that the Clean Air Act requires the Airports to monitor the emissions and their effects on individuals living nearby. He further alleges that CERCLA and EPCRA require that the Airports report to the federal government's National Response Center and certain state and local emergency response agencies the amount of deicing fluid discharged. Plaintiff contends that the Airports knowingly failed to do or report any of these things.

In order to receive federal funding, an airport must certify that it will comply, and/or is in compliance, with all applicable environmental laws and regulations. Accordingly, the basis of Plaintiff's False Claims Act claims is that the Airports knowingly violated the aforementioned environmental laws, and, thereafter, knowingly and falsely certified to the Government that they were in compliance with those, and other, laws so as to receive federal funds. As a result of these alleged misrepresentations, Plaintiff contends that the Airports wrongfully received millions of dollars from the Government in violation of 31 U.S.C. §§ 3729(a)(1) and (2).¹⁰

⁹ Title V of the Clean Air Act requires an entity to obtain a permit if it emits 20,000 pounds per year of a single "hazardous air pollutant" or 200,000 pounds per year of a "volatile organic compound."

¹⁰ Plaintiff also asserts a "reverse" FCA claim pursuant to 31 U.S.C. § 3729(a)(7). In essence, he contends that the Airports also knowingly made false statements to the Government in order to conceal the fact that they owed fines for their environmental violations. Given the

The Airports' argument in support of summary judgment is simple. They argue that the Federal Aviation Administration's own publications, as well as other private studies that are widely accepted and relied upon in the industry, establish that air emission factors for ethylene and propylene glycol used in airport deicing operations are *de minimis* (i.e., they range from .001% to .2%; or, more simply stated, .001% to .2% of the amount sprayed is "emitted" into the atmosphere). Even accepting as accurate the quantities of deicing fluids alleged in the Second Amended Complaints, as they have done, the Airports contend that they were not, and are not, subject to any permit and/or reporting obligations under federal environmental laws. The Airports maintain that they justifiably may rely on published emission factors promulgated by the FAA. More importantly, however, they point out that the Plaintiff presents no evidence that the competing methodologies for calculating emission factors upon which the Airports rely were, or are, facially unreliable; or that any reliance by the Airports was unjustified. Indeed, they highlight the fact that the Plaintiff's own retained expert acknowledged in his deposition that the FAA's publication is considered "guidance" material in the industry with regard to glycol emissions.

Even if the accepted industry emission factors for ethylene and propylene glycol are incorrect, as the Plaintiff's briefs argue at length, the Airports contend that they cannot have "knowingly" violated the False Claims Act because, even if incorrect, published information by the FAA supports their position that no permit and/or reporting obligations arose. In this regard, though the Airports maintain that the emission factor Plaintiff proposes is grossly exaggerated, they argue that their legal position in connection with the Plaintiff's claims in these cases is not contingent upon such a finding.

Court's conclusion herein with regard to the primary FCA claims, the Court need not further address Plaintiff's "reverse" FCA claim.

They maintain that the Plaintiff's arguments, and "expert" submissions, with which they take issue for other reasons, seek to define the proper scientific methodology for determining ethylene and propylene glycol emission factors. Such a determination, the Airports argue, is not germane to the present False Claims Act claims. Rather, if at all, it is relevant only to a determination of the accuracy of the purported glycol-based emission factors.

Plaintiff responds that the factors cited by the Airports' studies are misleading because they only account for amounts of ethylene and propylene glycol that *evaporate*, as opposed to emit (as Plaintiff defines the term), into the atmosphere. Thereafter, he criticizes each study's conclusion, as well as the context in which some arise (*e.g.*, by a private company with an arguable interest in the study's outcome) in an effort to discredit each. Focusing on the methodology alone, and not the Airports' argument that reliable published data supports their position, Plaintiff argues that a much higher quantity of these substances actually is *emitted* into the atmosphere during deicing operations. He avers that, as a result of *over spray, taxiing and take-off*, which he maintains are not contemplated by the Airports' studies, nearly 20% to 35% of the deicing fluid reaches the atmosphere, as opposed to .001% to .2%, as proposed by the Airports.

Based on his expert's opinions (as well as his own) that the true emission factor for ethylene and propylene glycol is actually 20 to 35%, which is likewise informed by scientific literature available to the public, Plaintiff contends that the Airports had reporting and permit obligations under the Clean Air Act, CERCLA and EPCRA relative to their use of these substances in their deicing operations. Alternatively, Plaintiff argues that an issue of fact is presented such that summary judgment is inappropriate.

IV. DISCUSSION

The legal issue pertinent to the Airports' motions is discrete and does not require a judicial determination of the *proper scientific methodology* for determining emission factors for ethylene and propylene glycol. While such a determination would be required in the context of a direct claim for an environmental law violation, no such claim is asserted in these cases.

Rather, Plaintiff's claims are grounded upon whether the Airports "knowingly" misrepresented to the Government that they were not violating federal environmental laws. The mere violation of a federal environmental law does not necessarily validate the Plaintiff's claims; while it is relevant, it is not determinative of the Plaintiff's FCA claims. In the presence of competing theories for determining if such a violation occurred, allegations that the Airports "knowingly" lied to the Government regarding compliance turn more on the Plaintiff's ability to present evidence that the Airports knew that, in these cases, the emission factors they used were incorrect (or at least that they had substantial reason to suspect that they were incorrect) than upon the Plaintiff's ability to present evidence that the emission factors actually are wrong.

This distinction is key to resolving the issue presented in the instant motions. As noted above, the Airports argue that their deicing activities do not violate any applicable environmental law because the emission factors upon which Plaintiff rely are "simply wrong." Importantly, however, they also argue that, even if the deicing emissions exceeded the levels allowable without a permit, the Airports did not "knowingly" misrepresent anything to the Government because their conclusion (and, hence, certification) that they were compliant was based on facially reliable published emission factors promulgated by credible sources, not the least of which is the FAA.

The thrust of the Plaintiff's brief is that the emission factors used by the Airports are flawed. Though interesting, this fact is only meaningful if the Plaintiff also can present evidence that the

Airports knew the factors were wrong, or, at least, unreliable. Because the Plaintiff presents no evidence that the Airports had such knowledge, beyond conclusory and vague allegations in the Second Amended Complaints (*see* paragraphs 38 in both documents) and his own affidavit, his arguments in opposition to summary judgment are unpersuasive because they focus only on the *scientific methodology*.

A. Standard Of Review.

As noted, this matter arises on the Airports' *Motions for Summary Judgment*. Federal Rule of Civil Procedure 56(c) governs summary judgment motions and provides:

The judgment sought shall be rendered forthwith if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law

Rule 56(e) specifies the materials properly submitted in connection with motions for summary judgment:

Supporting and opposing affidavits shall be made on personal knowledge, shall set forth such facts as would be admissible in evidence, and shall show affirmatively that the affiant is competent to testify to the matters stated therein The court may permit affidavits to be supplemented or opposed by depositions, answers to interrogatories, or further affidavits. When a motion for summary judgment is made and supported as provided in this rule, an adverse party may not rest upon the mere allegations or denial of the adverse party's pleading, but the adverse party's response, by affidavits or as otherwise provided in this rule, must set forth specific facts showing that there is a genuine issue for trial. If the adverse party does not so respond, summary judgment, if appropriate, shall be entered against the adverse party.

However, the movant is not required to file affidavits or other similar materials negating a claim on which its opponent bears the burden of proof, so long as the movant relies upon the absence of the essential element in the pleadings, depositions, answers to interrogatories, and admissions on file.

Celotex Corp. v. Catrett, 477 U.S. 317 (1986).

In reviewing summary judgment motions, this Court must view the evidence in a light most favorable to the non-moving party to determine whether a genuine issue of material fact exists. *Adickes v. S.H. Kress & Co.*, 398 U.S. 144 (1970); *White v. Turfway Park Racing Ass'n, Inc.*, 909 F.2d 941, 943-44 (6th Cir. 1990). A fact is “material” only if its resolution will affect the outcome of the lawsuit. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). Determination of whether a factual issue is “genuine” requires consideration of the applicable evidentiary standards. Thus, in most civil cases the Court must decide “whether reasonable jurors could find by a preponderance of the evidence that the [non-moving party] is entitled to a verdict.” *Id.* at 252.

Summary judgment is appropriate whenever the non-moving party fails to make a showing sufficient to establish the existence of an element essential to that party’s case and on which that party will bear the burden of proof at trial. *Celotex*, 477 U.S. at 322. Moreover, “the trial court no longer has a duty to search the entire record to establish that it is bereft of a genuine issue of material fact.” *Street v. J.C. Bradford & Co.*, 886 F.2d 1472, 1479-80 (6th Cir. 1989) (citing *Frito-Lay, Inc. v. Willoughby*, 863 F.2d 1029, 1034 (D.C. Cir. 1988)). The non-moving party is under an affirmative duty to point out specific facts in the record as it has been established which create a genuine issue of material fact. *Fulson v. City of Columbus*, 801 F. Supp. 1, 4 (S.D. Ohio 1992). The non-movant must show more than a scintilla of evidence to overcome summary judgment; it is not enough for the non-moving party to show that there is some metaphysical doubt as to material facts. *Id.*

B. Analysis.

It is clear from the parties’ papers that there is room for debate as to the proper *scientific*

methodology for calculating glycol emissions in connection with airport deicing operations.¹¹ Indeed, Plaintiff and his expert concede this point by acknowledging the existence of the Airports' studies while attempting to discredit studies' the conclusions; Plaintiff simply asserts that the Airports are wrong to rely upon the several studies they cite because the studies are incorrect. Plaintiff himself, therefore, acknowledges the existence of a debate on this underlying scientific issue and then proceeds, *at length*, to weigh in on it.

Resolution of the emission factor debate, however, is not the ultimate issue presented in these cases. Rather, the key issue is whether the Airports knowingly and falsely certified to the Government that they were environmentally compliant. Accordingly, the Court need not resolve the emission methodology dispute in the context of these cases. While it could do so as a threshold matter, as Defendants suggest (thereby resolving the issue of whether the certifications were, in fact, false), it need not do so. Where, as here, the evidence establishes that, even if the emissions studies upon which the Airports rely turn out to be wrong, there is no evidence upon which a reasonable juror could conclude the Airports had a basis to know they were wrong, Plaintiff's FCA claims must fail because Plaintiff cannot prove that the Airports acted with knowledge that their certifications were false.

The Court thoroughly has reviewed the competing emissions data submitted by the parties. Though the Court understands the parties' reasons for relying on their respective sources – as well

¹¹ Though the Airports advocate that “there is no conflict” as between the parties' respective authorities, and that their authorities clearly are correct, the Court's review of the supporting documents demonstrates a sufficient divergence of opinion in the scientific community on the issue of glycol emissions to prevent the Court from deciding, as a matter of law, which *scientific methodology* is indeed accurate. It is true, however, that the Airports' “science” on the issue appears to be more widely accepted as accurate.

as the criticisms (mostly by the Plaintiff) of the competing sources – the Court does not ultimately choose between them. The Court’s review of these authorities, rather, is intended to highlight the fact that competing views exist, and that the Court acknowledges them as such. Indeed, facially credible authority appears to exist on both sides of the proverbial fence, a fact that further underscores the Court’s conclusion that the Plaintiff’s fraud-based claims must be dismissed.

1. The Airports’ Authorities.¹²

The Airports have presented their authorities through their expert, John A. Lengel, Jr., an environmental engineer who specializes in aviation environmental compliance. Assuming as true the allegations in the Second Amended Complaints – except for the emission factor proposed by the Plaintiff – Lengel opines that the amount of ethylene and propylene glycol that is released to the air during the Airports’ deicing and anti-icing operations is *de minimis* and far below the permit thresholds of the Clean Air Act or other environmental statutes at issue. He bases his conclusions on four published sources.

First, Lengel considered a study entitled “*Air Quality Procedures for Civilian Airports & Air Force Bases*” published by the Federal Aviation Administration (1997) (# FAA-AEE 97-03) (the “FAA Study”). This is the primary study upon which the Airports rely and, having been published by the FAA, the primary study with which the Plaintiff disagrees. Lengel highlights the fact that this

¹² Though the parties’ papers utilize their competing emission factors to calculate actual poundage amounts of ethylene and propylene glycol that arguably are emitted – each of which is based on the amounts of deicing fluid alleged in the Second Amended Complaints, which has been conceded for purposes of these motions – the Court does not address that specific information. Neither party has argued that the calculations are mathematically incorrect, except for the use of improper emission factors. The Court outlines the parties’ proposed authorities, therefore, only in connection with their conclusions as to the applicable emission factor (or functional equivalent), and not the details (*i.e.*, poundage outputs) that flow from those conclusions.

study is the only one of its kind published by the Government that specifically estimates air emissions of ethylene and propylene glycol. He avers that it is widely used by aviation facilities for estimating glycol emission.¹³ In sum, the FAA Study concludes that, for every pound of deicing fluid used or sprayed in an airport's deicing operation (e.g., spraying on aircraft), .0067 of that pound is emitted into the atmosphere. Likewise, the study concludes that for every pound of deicing fluid used or sprayed in an airport's anti-icing operation (e.g., for runways), .00011 of that pound is emitted into the atmosphere. The Airports, therefore, characterize the relevant emission factor, as defined by the FAA Study, as .011% (i.e., the higher of the two).

Second, Lengel considered a report entitled "*Estimation of Glycol Air Emissions from Aircraft Deicing*" authored by David McCready and presented at the Air & Waste Management Association's 91st Annual Meeting & Exhibition in 1998 (the "McCready Study"). The McCready Study provides two methods for calculating glycol air emissions: 1) the emission factor approach (which the study admits is limited in applicability due to site-specific variables), and 2) the typical event approach. Without setting forth the specific technical data the approaches provide, their conclusions parallel the emission factor set forth in the FAA Study in terms of the poundage of deicing fluid that reaches the atmosphere in connection with deicing operations. The study explains that its information is premised heavily on research done by the Union Carbide Corporation, which the study identifies as "a manufacturer of Ethylene Glycol-based ADF and AAF." It also explains in

¹³ Though he challenges the FAA's "jurisdiction" over environmental issues, which really has nothing to do with the *facial reliability* of information published by the government agency tasked with governing aviation in the United States, Plaintiff states in his affidavit that airports often incorrectly rely on the FAA Study as a source for determining air emissions. Despite his disagreement with its substance, therefore, Plaintiff clearly admits that the study is relied upon, which is really the issue at the heart of the instant motions.

its “Conclusion” section that “individual deicing scenarios vary considerably,” but that “both approaches show that predicted emissions are low.” In this regard, the study is forthright as to its own limitations, but provides two facially workable, and reliable, approaches for determining glycol-based emissions, both of which support the conclusion that the Airports’ emissions remained below reportable levels.

Third, Lengel considered a study entitled “*Ethylene Glycol Emissions from Aircraft Deicing Operations*” authored by Douglas Pelton and presented at the Air & Waste Management Association’s 88th Annual Meeting & Exhibition in 1995 (the “Pelton Study”). Unlike the FAA or McCready Studies, Lengel explains, the Pelton Study’s conclusions are based, not on the *annual amount* of deicing fluid used at an airport, but on the *number of deicing events* that occur. Considering the Plaintiff’s allegation that the Airports exceeded the 20,000 pound threshold established by the Clean Air Act, Lengel opined that, based on the Pelton Study, the Airports each would need to deice between 645,161 and 6,666,666 planes per year before a permit obligation would arise. In sum, he concludes that the Pelton Study indirectly parallels the FAA and McCready Studies’ conclusions because the Airports clearly do not deice that many planes each winter.

Finally, Lengel considered a study entitled “*A Review of the Fate of Ethylene Glycol in the Environment*” authored by Charles Staples and prepared for the Ethylene Glycol Panel, Chemical Manufacturers Association (1996) (the “Staples Study”). The Staples Study does not address propylene glycol. It does conclude, however, that ethylene glycol evaporates into the atmosphere at a rate of .2% at seventy-seven (77) degrees Fahrenheit.¹⁴ Based on this study, and the temperature

¹⁴ Lengel notes that the .2% factor is an over-estimate given the temperature variable from which the study drew its conclusions. Obviously, airport deicing activities occur in the wintertime when the temperature is much lower than seventy-seven (77) degrees Fahrenheit

variable involved, Lengel concludes that the .2% factor serves as a liberal outer marker. Utilizing the factor proposed by the Staples Study, the Airports' glycol emissions still fall significantly below amounts that impose permit and/or reporting obligations under the implicated federal environmental statutes.

2. The Plaintiff's Affidavits and Authorities.

As an initial matter, the Court notes *some* of the Plaintiff's challenges to the aforementioned authorities presented by the Airports. In so far as the Court's objective does not include a determination as to which set of authorities is correct, however, its summary here is provided only in the interests of recognizing the potential weaknesses of even facially reliable sources, which the Court finds the Airports' sources to be. Even a severe criticism, unless acknowledged and ignored by the Airports, does not hinder their defense that alternate authority – whether accurate or not – supports their “good faith” compliance certification.

Primarily, the Plaintiff challenges the FAA Study on the ground that it only considers “evaporation” and not alternative means (*e.g.*, taxiing and “sheering” during take-off) by which deicing fluid reaches the atmosphere. Lengel opined, however, that, based on the totality of the studies (the FAA Study in particular), the emission factors espoused included total emissions and were not limited merely to evaporation, despite the studies' references to evaporation.¹⁵ Plaintiff also

– thus, the need for deicing. In this regard, Lengel points out that the .2% factor likely is inflated.

¹⁵ This view leaves open, but does not directly address, the argument that “emission” into the atmosphere can only occur through evaporation. As the argument goes, the event by which a liquid becomes a gas (*i.e.*, enters the atmosphere) is evaporation – whenever, or under whatever conditions, evaporation is evaporation. This view counters at least one of the Plaintiff's criticisms. Whether correct or not, as previously explained, is not the point.

challenges the McCready Study because, admittedly, it is based on information gathered by the Union Carbide Corporation, which the Plaintiff argues had a direct financial interest in the outcome of the study because it was a major producer of the chemicals at issue. In sum, he concludes that the information provided by Union Carbide is biased.¹⁶

The Court turns now to the Plaintiff's authorities. First, Plaintiff presents his own affidavit and accompanying exhibits. In sum, Plaintiff presents himself as an expert in the environmental field with the authority to opine on the proper methodology for calculating glycol emissions. Based on his opinion, observations of deicing operations and various authorities similar to those cited by the Airports (only with different conclusions), Plaintiff estimates that glycol emission factors actually range from 20 to 35%. Though the Court has reviewed each source cited by the Plaintiff, of which there are many, the Court highlights herein only a few. The Court also addresses certain opinions and arguments asserted in the Plaintiff's affidavit.

Initially, Plaintiff takes issue with the "approach" purportedly employed by some, or all, of the Airports' studies in reaching their emission factor conclusions. Characterizing the approach employed by those studies as the "engineering judgment" approach, the Plaintiff cites a May 2001 publication by the EPA entitled "*Introduction to Stationary Point Source Emission Inventory Development*," which rates the most commonly used "emission estimation approaches" according to cost and reliability. In sum, he notes that the "engineering judgment" approach rates much lower

¹⁶ Curiously, Plaintiff does not openly admit that the "expert" views he expresses in his own affidavit can also be characterized as biased on the same ground. Clearly, Plaintiff stands to recover a significant sum of money under the *qui tam* provisions of the False Claims Act if his claims are successful, or, at the very least, survive summary judgment.

than the approach he purports to have utilized – the “material balance” approach.¹⁷

In addition to the fact that this report post-dates the time frames alleged in the Second Amended Complaints (*i.e.*, 1992-2000), and indeed even the filing date of the original action giving rise to these cases (*i.e.*, 2000), this report merely presents information regarding the preferred scientific approaches for estimating emissions. Though it strengthens the Plaintiff’s position, if any, the support it provides is indirect at best in so far as the report does not propose an actual emission factor; instead, it only speaks to approaches for calculating an emission factor. Again, however, the Court does not opine on the substance of the report – it only acknowledges that they exist.

The Plaintiff then cites authorities that do purportedly present different emission factors. For example, Plaintiff cites a 1985 report entitled “*State-of-the-Art Report of Aircraft De-icing / Anti-icing*,” (“Transport Canada Report”) which was prepared by Transport Canada (a Canadian environmental regulatory agency), for the proposition that 35% of the deicing fluid sprayed on an aircraft will be “carried away by the wind.”¹⁸ Similarly, he cites two additional authorities for the proposition that 15 to 35% of the deicing fluid sprayed is “dispersed to the air.”¹⁹

With regard to the Transport Canada Report in particular, McDowell, Plaintiff’s other expert,

¹⁷ Interestingly, though the “material balance” approach is not rated the lowest in the EPA report, it is not the highest either.

¹⁸ See p. 41 of the report, which is attached as an exhibit to Plaintiff’s affidavit.

¹⁹ See Plaintiff’s reference in his affidavit at ¶¶ 10 and 20 to two EPA reports: “*Emerging Technology Report: Preliminary Status of Airplane Deicing Fluid Recovery System*” (1995) and “*Preliminary Data Summary, Airport Deicing Operations (Revised)*” (2000). Noteworthy, the 2000 EPA publication post-dates the January 24, 2000 filing date of the original action giving rise to these cases.

admits that the report was not designed to provide a methodology for estimating air emissions.²⁰ Rather, it was geared more toward groundwater contamination, as the Airports highlight in their briefs. Furthermore, the studies' references to disbursement to the air is equally, if not more, vague as the Airports' studies' references to evaporation.²¹ As with the Airports' studies, the Court expresses no opinion as to the validity of these items. Rather, it merely points out that competing facially reliable authority exists in support of both parties' positions, despite that each authority has weaknesses subject to criticism.²²

Second, Plaintiff presents the affidavits (and their accompanying exhibits) of Scott McDowell, an eighteen (18) year environmental professional.²³ In sum, McDowell's affidavits closely tracks the

²⁰ See McDowell deposition (attached to the Airports' reply brief) at p. 103.

²¹ In his affidavit, at paragraph 29, Plaintiff attempts to harmonize the phrase "dispersed to the air," and other similar derivations, to "air emissions" or "fugitive emissions." Without reference to other third party authority, he simply states that it is his opinion that these phrases mean the same thing. The Court is puzzled as to how Plaintiff's opinion on this issue is any more credible than Mr. Lengel's opinion that the Airports' studies' references to "evaporation" equates to "emissions."

²² Though the Plaintiff's affidavit references other authorities as well, which the Court has reviewed, those authorities are far less convincing; the Court is hard-pressed to characterize them even as "facially reliable," at least for the purposes Plaintiff attempts to rely on them.

²³ Scott McDowell has submitted several affidavits, each in connection with one of the Plaintiff's briefs, or in response to an objection by the Airports. The first was submitted with the Plaintiff's opposition brief, and the second with the Surreply brief. After the Airports objected to the second affidavit as containing purely inadmissible hearsay, McDowell submitted a third affidavit, which is attached to the Plaintiff's response to the Airport's objections.

With regard to the second affidavit, the Airports objected formally (Doc. 118 in Case No. 00cv208 and Doc. 106 in Case No. 03cv1563) on the ground that the affidavit contains nothing but inadmissible hearsay. The Court permitted the filing of the affidavit (Doc. 120 in Case No. 00cv208 and Doc. 108 in Case No. 03cv1563), but notes herein that the Airports' objections are well-taken. McDowell's second affidavit (Doc. 121 Case No.

conclusions outlined in the Plaintiff's affidavit, citing many of the same authorities in support of their conclusions. As did the Plaintiff, McDowell challenges as unreliable the Airports' studies based, in part, on the fact they rely only on evaporation rates, as well as information McDowell characterizes biased – namely, the Union Carbide data, which also purportedly relied only on evaporation rates. Despite his disagreement with its conclusions, however, McDowell acknowledges the existence of the FAA Study as an emission factor authority, as evidenced by his statement that Lengel's emissions estimates are “based on an ‘emission’ factor recommended by the Federal Aviation Administration.” See McDowell Affidavit (attached to Plaintiff's opposition brief) at ¶ 4 (emphasis added).

As did the Plaintiff, McDowell avers that his emissions calculations flow from his use of the more reliable “material balance” approach, as opposed to the “engineering judgment” approach, which he maintains was employed by the Airports' studies. In support of the proposition that no authority has discredited use of the material balance approach, however, McDowell states that the “EPA has not evaluated the material balance for deicing events in regards to air emissions.” See McDowell Affidavit (attached to Plaintiff's opposition brief) at ¶ 5.4. McDowell admits, therefore, that the EPA has not espoused his and/or the Plaintiff's position directly, though it is clear from the various other authorities on which he and the Plaintiff rely that alternate views on the subject exist.

McDowell also provided the Court with “visual” items – *e.g.*, photos and video tapes – depicting deicing operations. Through these non-scientific items, he asks the Court to observe the

00cv208 and Doc. 109 in Case No. 03cv1563) is complete hearsay and inadmissible – *i.e.*, it offers for their truth statements of an EPA representative with whom McDowell allegedly spoke. His subsequent attempt, *via* his third affidavit attached to his response to the Airports' objections, to justify the affidavit's assertions is noted, and the Court considers the information contained in all of McDowell's affidavits for what it is worth. Given the Court's ultimate conclusion in this case, however, the majority of the substance of McDowell's affidavits is irrelevant, in any event.

significant amount of deicing fluid that is “carried away by the wind,” especially on windy days. He goes on then to invite a “reasonable assumption” that over-spray can travel great distances on windy days. Based on these items, and others, McDowell concludes, as did the Plaintiff, that the emission factors on which the Airports rely are flawed.

3. Plaintiff’s FCA Claims Cannot Withstand Summary Judgment.

_____ In his Second Amended Complaints and affidavit, Plaintiff asserts that he advised the Cleveland Airport to prepare Title V permits (Clean Air Act) in connection with their glycol-based emissions because he believed that their emissions exceeded statutorily defined levels. He does not identify who he told this to, or when, or what he explained was the basis for his belief, however. He simply asserts that he gave this advice to the Cleveland Airport, and it ignored him. Assuming the Plaintiff’s assertions are true, as the Court must do, the Court finds that such assertions alone, without supporting evidence demonstrating the Airports’ recognition and rejection of competing reliable authority beyond the Plaintiff’s naked advice, do not justify the conclusion that the Airports engaged in fraud when issuing their compliance certificates.²⁴

This conclusion is especially true, moreover, in light of a number of other undisputed facts in the record, including: (1) Plaintiff’s concession that no airport anywhere in the United States has ever used his emission factor methodology to apply for a Title V permit for its glycol-based air emissions; (2) Plaintiff’s concession that no airport has ever filed a report under CERCLA or EPCRA in connection with its deicing activities, including airports in climates where even more deicing activities occur than in Northern Ohio; (3) Plaintiff’s concession that neither the EPA, the FAA, nor

²⁴ Plaintiff does not claim that he ever provided this advice to the Toledo Airport.

any state environmental regulatory agency has ever brought an enforcement action against an airport for failing to obtain a permit or make other filings in connection with deicing activities; (4) the fact that the primary authority upon which the Airports rely for their emissions factor data is the very federal regulatory authority charged with oversight of air activity at the Airports; (5) the fact that the FAA itself asserts that the recommendations it makes in its handbook, including those relating to air emissions, are “consistent with all federal air quality laws and regulations;” (6) the fact that, as the Court has already found, all the studies on which the Airports rely are, at the least, facially reliable; and (7) the fact that the Plaintiff relies primarily on his and Mr. McDowell’s unpublished and, to date, largely untested conclusions as to the appropriate *scientific methodology* for measuring the type of air emissions at issue here.

On this record, the Court finds that no reasonable juror could conclude that the Airports knowingly presented false data to the Government regarding the environmental effects of their deicing operations.

In the end, Plaintiff must take his regulatory issues regarding the emission factors directly to the regulatory agencies tasked with their governance – namely, the FAA and/or EPA. While Plaintiff may be correct that a regulatory problem actually does exist with regard to accurate glycol emission factors, he cannot attempt to correct that purported problem through the vehicle of this fraud case under the False Claims Act. Absent evidence to the contrary, the Airports simply cannot be deemed to have committed fraud when their compliance is measured under emission factors published by the very federal agency they are accused of deceiving – the FAA. Plaintiff presents a scientific dispute, not a fraud case. Though his motives may be pure, and his scientific arguments may ultimately prove to have merit, they are misplaced in these cases. For these reasons, the Plaintiff’s claims cannot

survive summary judgment and must be dismissed.²⁵

V. CONCLUSION

For the forgoing reasons, the Defendants' *Motions for Summary Judgment* (Doc. 101 in Case No. 1:00cv208, and Doc. 90 in Case No. 1:03cv1563) are **GRANTED** and the Plaintiff's claims against both Defendants are **DISMISSED**.

IT IS SO ORDERED.

s/Kathleen M. O'Malley
KATHLEEN McDONALD O'MALLEY
UNITED STATES DISTRICT JUDGE

DATED: September 30, 2005

²⁵ In the final sentences of his Surreply, Plaintiff asserts for the first time that, even if the Court finds the Airports arguments regarding the air emissions associated with their deicing activity well-taken, issues may still remain regarding the Airports' compliance with CERCLA and EPCRA. Plaintiff offers no argument on this point, however, and presents no documentation or other evidence from which the Court can conclude that a knowing violation of those statutes occurred. The Court declines to search the record for evidence to which Plaintiff himself does not point.